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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,442	05/24/2001	Kaoru Matsumoto	109611	9807

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EXAMINER

ELKASSABGI, HEBA

ART UNIT PAPER NUMBER

2834

DATE MAILED: 02/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/863,442

Applicant(s)

MATSUMOTO, KAORU

Examiner

Heba Elkassabgi

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/19/02.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,4,6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,4,6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a) because they fail to show the "lid member being integrally formed with the bearing support member" and the "motor base that is integrally formed with a casing", as described in claim #2 and #6 and specification.

Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The amendment filed 11/19/02 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Claim #6 the lid member

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being made of magnesium die-cast material was not stated in the original specification or in any of the original claims.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

Claim 6 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. Claim 6 states that the lid member is made of magnesium die-cast, which was not in the original specification or in any of the original claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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I. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over English et al. (U.S. Patent 4682065) and further in view of Takahashi (U.S. Patent 5663604) and Plunkett (U.S. Patent 4554941) and Permuy (U.S. Patent 6031306).

English et al. illustrates in Figure 2 an air impeller unit in which the bearings (22 and 24) are at the center of a cylindrical housing with the bearings (22 and 24) are supported by the shaft (20). The motor yoke (18) is supported onto the shaft (20) and the permanent magnet (16) located at the inner periphery of the impeller (12), with the impeller located on the outer periphery of the shaft (20) and a housing base portion (28). However, English et al. does not show a stator core with a stator coil wound around the core and the coil disposed on the inside of the magnet and a circuit board mounted with an electronic circuit and a partition plate interposed between the stator coil and circuit board.

Takahashi discloses in Figure 1 and 3, a fan (1) with the stator core (20) having a stator coil (28) wound around the core and located on the inner periphery of the magnet (50) and a conductive lid member (supporting plate) (8) that is located between the stator core (20) and circuit board (54). Further including the motor base (cap) (178) that is formed with the casing (housing)(103) and that the lid member (supporting plate)(108) is formed with the bearing support member (bearing tower)(114) and that the motor base (cap)(178) is connected to the lid member (supporting plate) (108) through the

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radial arms (110), for the purpose of reducing the overall size of the motor and maintaining the desired mounting area of the circuit board.

Plunkett illustrates in Figure 3 a fan with the electric circuit components (48) mounted onto a circuit board (44), for the purpose of decreasing the required current.

Permuy discloses in Figure 1 a cylindrical casing shell (2) having an end plate (motor plate)(4) that is integrally formed with the casing (2), in order to close one axial end of the motor.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify English et al. by adding the stator coil on the inside of the magnet with a supporting plate between the stator coil in order to reduce the overall size of the motor and mounting a circuit board with an electric circuit component to decrease the required current and the end plate integral with the casing to close one end of the motor.

In regards to Claim #2, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose a suitable material such as aluminum, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

In regards to Claim #6, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose a suitable material such as magnesium, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

II. Claims 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over English et al. (U.S. Patent 4682065) and further in view of Takahashi (U.S. Patent 5663604) and Plunkett (U.S. Patent 4554941) as applied to Claim 2 and in further view of Permuy (U.S. Patent 6031306).

English et al., Takahashi, and Plunkett substantially teaches the claimed invention except that it does not show a casing portion with cooling fins disposed at the outer peripheral wall. Permuy illustrates in Figure 1 a fan with cooling fins (32) located on the outer periphery of the casing portion (4 and 24), for the purpose of dissipating heat outside the casing.

It would have been obvious at the time of the invention was made to a person having ordinary skill in the art to modify the invention of English et al., Takahashi, and Plunkett as applied to claim 2 by adding the cooling fins disposed at the outer peripheral wall of the casing portion to dissipate heat outside the casing.

Response to Arguments

Applicant's arguments with respect to claims 2 and 4 have been considered but are moot in view of the new grounds of rejection. However, the examiner is addressing the following arguments.

In response to Applicant's arguments that the neither English et al. Takahashi, and Plunkett do not recite a blower, the recitation is not given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. *Kopa V. Robie*, 88 USPQ 478.

In regards to Applicants argument that the casing being approximately cylindrical is not supported by either English et al. Takashi, or Plunkett is not persuasive. Applicant states "approximately cylindrical which is defined as "almost, very close", meaning that the shape can be very close to cylindrical but not exactly cylindrical however, Permuy does state in column 2 paragraph 9 lines 51-52 "a cylindrical casing shell (housing)."

In regards to Applicants argument that the 103 rejections does not disclose states a "stator core having a stator wire wound around and disposed inside the permanent magnet", is traversed by the examiner Takahashi illustrates in Figure 1 the limitation.

In regards to Applicants argument that a circuit board disposed closely to the stator and the circuit board being within the casing, is respectfully traversed by the examiner. English states specifically in column 3 paragraph 2 lines 18 –19 “a printed circuit board that is disposed there within and with the motor stator mounted on and about the tubular axial housing portion.

In regards to Applicants argument that Takashi and Plunkett do not discloses the elements to the electric circuit components on the circuit board is respectfully traversed by the examiner. It is inherently known in the art that the printed circuit board contains electric components. The examiner has enclosed a copy of the definition of the board in which the definition as stated. States that the board is “a sheet of insulating material carrying circuit elements and terminals so that it can be inserted in an electronic apparatus”. This definition is derived from the Merriam-Webster's Collegiate Dictionary, 10th edition; page 127 Column 1 under “board”.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heba Elkassabgi whose telephone number is (703) 305-2723. The examiner can normally be reached on M-Th (6:30-3:30), and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3431 for regular communications and (703) 305-3432 for After Final communications.

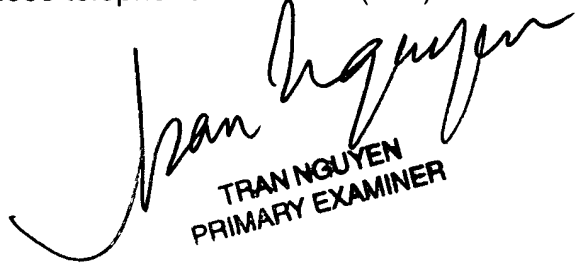
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

Heba Y. Elkassabgi
February 8, 2003


TRAN NGUYEN
PRIMARY EXAMINER